DOCUMENT RESUME

ED 461 129 CS 510 702

TITLE	Writing User-Friendly Documents: A Handbook for FAA Drafters.
INSTITUTION	Plain English Network.
SPONS AGENCY	Federal Aviation Administration (DOT), Washington, DC.
PUB DATE	2000-02-00
NOTE	42p.
AVAILABLE FROM	For full text: http://www.faa.gov/language/guidance2.doc.
PUB TYPE	Guides - Non-Classroom (055)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Audience Awareness; Language Usage; *Technical Writing; User Satisfaction (Information); *Writing Skills; *Writing Strategies
IDENTIFIERS	*Communication Context; *Plain English; Writing Models; Writing Style

ABSTRACT

Studies show that clearly written documents improve compliance and decrease litigation. Writing that considers the readers' need for clear communication will improve the relationship between the government and the public it serves. This handbook contends that the most important goals are to engage the reader, write clearly, and write in a visually appealing style. The handbook then summarizes some of the best techniques to achieve these three goals. Following the overview, it presents detailed suggestions for applying these techniques to writing. Appended are a list of words and expressions to avoid and a list of simpler words and phrases to use. (NKA)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 461 129

Writing User-Friendly Documents

A Handbook for FAA Drafters

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Prepared by the Plain English Network (PEN) (www.plainlanguage.gov)
Adapted for FAA, February 2000 (http://www.faa.gov/language/)

CS 510 702

2 BEST COPY AVAILABLE

Writing User-Friendly Documents

Table of Contents

1. Introduction

2. Overview Of Better Writing Techniques

    2.a. Engage Your Readers
    2.b. Write Clearly
    2.c. Write In a Visually Appealing Style

3. Techniques for Better Writing

    3.a. Identify Your Audience
    3.b. Organize to Serve Your Reader
    3.c. Use a Question-and-Answer Format
    3.d. Use Pronouns
    3.e. Use Active Voice
    3.f. Use Short Sentences
    3.g. Address One Person, Not a Group
    3.h. Use the Present Tense
    3.i. Use "Must" to Indicate Requirements
    3.j. Place Words Carefully
    3.k. Use If-then Tables
    3.l. Avoid Confusing Words and Constructions
    3.m. Use Informative Headings
    3.n. Divide Your Material Into Short Sections
    3.o. Limit Each Paragraph to One Topic
    3.p. Use Lists

Appendix A - Words and Expressions to Avoid

Appendix B – Simpler Words and Phrases

1. INTRODUCTION

The traditional way of writing has not worked well. Too often, complicated and jargon-filled documents have resulted in frustration, lawsuits, and a lack of trust between citizens and their government. To overcome this legacy, we have a great responsibility to communicate clearly.

Studies show that clearly written documents improve compliance and decrease litigation. Writing that considers our readers' need for clear communication will improve the relationship between the government and the public it serves.

√ How can we be better writers?

We believe that the most important goals are these:

- Engage your reader
- Write clearly
- Write in a visually appealing style

The next few pages summarize some of the best techniques to achieve these three goals. Following the overview, you'll find detailed suggestions for applying these techniques to your writing.

2. OVERVIEW OF BETTER WRITING TECHNIQUES

2.a. Engage Your Readers

Engaging your readers sends a message that you have considered who they are and what they need to know. When you communicate a concern for your readers' needs, they are more likely to be receptive to your message.

When your document is plainly written, your readers are more likely to:

- Understand what you want and take appropriate action
- Focus on key information
- Believe that you are concerned with their needs

√ How can you engage your readers?

You engage readers by speaking to them directly and clearly and by organizing your message in a structure that reflects their interests. Here are some key ways:

Identify your audience: Identify your audience early and think about why the reader needs to read the document. Also identify people who will be interested in the rule, even if they are not directly affected. Write to everyone who is interested, not just to technical or legal experts. Keep in mind the average reader's level of technical expertise. (For more about identifying your audience, see 3.a.)

Organize to serve your reader: People read to get answers. They want to know how to do something or what happens if they don't do something. Organize your document to respond to these concerns. Frequently this means describing events in the order in which they occur--you fill out an application, you submit the application, FAA reviews the application, FAA makes a decision on the application.

Think through the questions your readers are likely to ask and then organize them into a comprehensive table of contents that will be an outline of the document. (For more information about organizing, see 3.b.)

Use a question-and-answer format: Frequently, questions make the best headngs. Try to ask the questions your readers would ask. Answer each question immediately.
Using the question-and-answer format can help readers, especially first time readers and readers

new to the subject area, scan the document and find the information they need. It also increases the chances that they will see a question that they didn't have, but need to know the answer to. (For more about this format, see 3.c.)

Use "you" and other pronouns to speak directly to readers: "You" reinforces the message that the document is intended for your reader in a way that "he," "she," or "they" cannot. More than any other single technique, using "you" pulls readers into your document and makes it relevant to them. Using "we" to refer to our agency economizes words and make your document more accessible to the reader. (For more about using pronouns, see 3.d.)

Use the active voice: Active voice makes it clear who is supposed to do what. It eliminates ambiguity about responsibilities. Don't say, "It must be done," but, "You [or someone else] must do it." (For more about active voice, see 3.e.)

2.b. Write Clearly

For years, it seems that most of us have been addressing our documents mainly to technical experts and lawyers, without considering the many other readers we want to influence. This has created a jargon-laden, legalistic style that does not clearly convey important information. How can people comply with requirements if we don't describe them clearly? We must pay far greater attention to making our documents readable.

√ How can you write more clearly?

FAA documents such as regulations, airworthiness directives, and advisory circulars present special challenges because of the highly technical information they often contain. At the same time, you have multiple audiences, some highly knowledgeable, some less so. In fact, focus group results show that even technical experts do not always understand technical language easily or quickly. The following techniques will help ensure that you keep your language clear, so that your users can focus on technical information.

Use short sentences: Express only one message in each sentence. Long, complicated sentences often confuse your reader and show that you aren't clear about what you want to say. Shorter sentences show clear thinking. Shorter sentences are also better for conveying complex information; they break the information up into smaller, easier-to-process units. Vary your sentence structure to avoid choppiness, but don't revert to tangled multi-clause sentences. (For more about sentence structure, see 3.f.)

Write to one person, not to a group: Use singular nouns, pronouns, and verbs to direct your writing to one individual reader. This prevents confusion about whether a requirement applies to readers acting individually or in groups. (For more about using the singular, see 3.g.)

Use the simplest tense you can: Using present tense avoids the clutter of compound verbs and clearly conveys what is standard practice. When writing regulations, remember that by the time your reader reads the regulation, the future (tense) is now. (For more about verb tenses, see 3.h.)

Use "must" to indicate requirements: Use "must" for an obligation, "may " for permission, and "should" for a recommendation. Use "may not" to convey a prohibition. Avoid the ambiguous "shall." (For more on "must" and "shall," see 3.i.)

Place words carefully: There are several ways that you can reduce ambiguity:

- Keep subjects and objects close to their verbs.
- Put conditionals such as "only" or "always" and other modifiers next to the words they modify. Write "you are required to provide only the following," not "you are only

required to provide the following."

- Put long conditions after the main clause. Write, "complete form 9-123 if you own more than 50 acres and cultivate grapes," not "if you own more than 50 acres and cultivate grapes, complete form 9-123." (For more on word placement, see 3.j.)

Use "if-then" tables: If material is particularly complex and many conditional situations are involved, try to use an "if-then" table. (For examples of "if-then" tables, see 3.k.)

Avoid confusing words and constructions: Common sources of confusion include the following. (For more on confusing words, see 3.l.)

- Undefined or overused abbreviations and acronyms
- Two different terms used for the same thing (car, vehicle, auto, conveyance--choose one)
- Giving a new technical or legal meaning to a word commonly understood to mean something different (defining "car" to include trucks.)
- Using legal, technical, and fashionable (but confusing) jargon
- Strings of nouns forming complex constructions (surface water quality protection procedures)
- Pronouns that don't clearly refer to specific nouns
- Stilted, wordy language

2.c. Write In a Visually Appealing Style

We want our documents to help readers get information and understand and comply with requirements with the minimum possible burden. Visually appealing documents are far easier to understand than more traditional styles.

Older-style regulations are often dense and confusing. Replace blocks of text with headings, tables, and more white space. You will help your reader by making the main points readily apparent and grouping related items together. Use a clear and uncrowded presentation and your readers will be more likely to understand and comply with regulatory requirements.

√ How can you make your documents visually appealing?

With visual layout, you draw your readers' attention to information they need to know. Even though the Code of Federal Regulations (CFR) format constrains regulatory writers in a number of ways, you can still take significant steps to make your documents visually appealing to the reader.

Use lots of informative headings: Headings attract your readers' attention to important information. They help readers find their way through a document and locate important points.

Make sure each heading has enough information to help your reader understand the content of the paragraph. You don't want your reader guessing what's in the section or trying to figure out how one section differs from another.. How often have you seen several different sections entitled "applications" or "appeals" in one document? Applications for what? Appeals of what? If you say "Application for a pilot certificate," the reader knows exactly what you are talking about, and the reader knows the difference between that section and another section entitled "Applications for an appropriate class rating."

On the other hand, headings should not be so long that they overwhelm the material in the section itself. (For more about informative headings, see 3.m.)

Write short sections: Short sections break up the material into easily understood segments and allow you to introduce a little white space into otherwise dense material. Short sections look easier to read and understand. Long sections can appear difficult and forbidding, even before someone tries to read them. (For more about section length, see 3.n.)

Include only one issue in each paragraph: Limiting each paragraph to one issue gives the document a clean appearance and contributes to the impression that it is easy to read and understand. By presenting only one issue in each paragraph, you can use informative headings that reflect the entire issue covered by the paragraph. (For more about keeping paragraphs to one issue, see 3.o.)

Use vertical lists: Vertical lists highlight a series of items in a visually clear way. Use

vertical lists to help your reader focus on important material. (For more about vertical lists, see 3.p.)

Vertical lists:

- Highlight levels of importance
- Help the reader understand the order in which he or she should fulfill requirements
- Make it easy for the reader to identify all necessary steps in a process
- Add white space for easy reading

√ In Conclusion...

If you follow the suggestions we've outlined in this section, you'll make a major contribution to the success of FAA's program. By writing clearly and in a visually appealing style, you'll help your readers understand and comply with your regulations or guidance material. Well-written documents will do a lot to improve reader satisfaction and compliance.

3. TECHNIQUES FOR BETTER WRITING

This section provides examples of how to use the techniques listed in the introduction. The examples are drawn from different agencies across the Federal government, including the FAA. Some of the regulatory examples are not quoted exactly from the Code of Federal Regulations, but were inspired by old or existing text. The rewrites are only suggestions for improvement using techniques of plain language, they aren't all actual documents.

In the rest of this handbook, we've used the symbols below to help indicate visually the points we're making.

We've used ...	to indicate...
√	particularly important concepts
	needs improvement
	our suggestions for improvement

3.a. Identify Your Audience

√ Identify who is affected by the document and write to get their attention and answer their questions.

You have to grab your readers' attention if you want to get your ideas across. Let's face it, readers just want to know what applies to them. The best way to grab and hold their attention is to figure out who they are and what they want to know. Put yourself in their shoes. It will give you a new perspective.

Tell your readers why the rule is important to them. Say, "If you want Federal aid for airport development, here's what you have to do." Or say, "If you want to apply for an airport state block grant, here's what you should know."

Many times a regulation has more than one audience. You may be talking to pilots and flight attendants, or air carriers and aircraft manufacturers. Break your document down into essential elements and determine which elements apply to each part of your audience. Then group the elements according to who is affected. If you are writing about training requirements, first tell the pilots what they have to do, then tell the flight attendants what they must do.
Identify clearly who you are speaking to in each section. Don't make a reader go through material only to find out at the end that the section doesn't apply.

Grant applicants must provide the following information: (a) Prior experience in the area covered by the grant; (b) Publications relevant to the area of the grant; (c) Other grants held at the time of application; (d) Name and address of the chief financial officer; (e) Nature of in-kind match being provided; (f) Approved overhead rate; and (g) Total proposed budget.

(a) When you apply for a grant, you must send us:
(1) A description of your experience in the area covered by the grant;
(2) Copies of any material that you have published relevant to the area of the grant and
(3) A list of other grant that you are now using.
(b) Your financial office must send us:
(1) The name and address of the chief financial officer;
(2) A description of the in-kind match you will provide;
(3) Your approved overhead rate; and
(4) A proposed budget.

3.b. Organize to Serve Your Reader

√ Well-organized, detailed tables of contents make it easy for the reader to identify all elements in a series of requirements.

√ Organize your table of contents in a logical order that responds to your readers' concerns.

Part of serving your readers better is organizing your document so that they can understand how a program works and where to find instructions for each step they need to complete. Your table of contents should be a reliable road map that readers can follow to get through a process painlessly. The table of contents below is organized in a logical sequence. The organization follows the order in which events occur and the order in which the public might ask questions.

Subpart A—Rulemaking Procedures

General

Sec.

11.11 How does the FAA issue rules?
11.17 What is a notice of proposed rulemaking?
11.19 What is a supplemental notice of proposed rulemaking?

Written Comments

11.41 Who may file comments?
11.43 What information must I put in my written comments?
11.45 Where and when do I file my comments?
11.47 May I ask for more time to file my comments?

Petitions for Rulemaking and for Exemption

11.63 Where and to whom do I submit my petition for rulemaking or petition for exemption?
11.71 What information must I include in my petition for rulemaking?
11.73 How does FAA process petitions for rulemaking?
11.75 Does FAA invite public comment on petitions for rulemaking?

3.c. Use a Question-and-Answer Format

√ The question-and-answer format is an efficient way to communicate with your reader.

The reader comes to your document—especially a regulation--with questions that he or she needs answered. Anticipate the reader's questions and pose them as he or she would. By doing this, you make it easier to for the reader to find information.

(a) No certificate holder required to conduct screening under a security program may permit any person to have...a dangerous weapon, either concealed or unconcealed, accessible to him or her while aboard an airplane for which screening is required unless:

(1) The person having the weapon is –

(i) An official or employee of the United States, or a State or political subdivision of a State, or a municipality who is authorized by his or her agency to have the weapon; or

(ii) Authorized to have the weapon by the certificate holder and the Administrator and has successfully completed a course of training in the use of firearms acceptable to the Administrator.

(a) To whom does this rule apply?

(1) The rule applies to a certificate holder required to conduct screening under a security program; and

(2) The rule applies to any person traveling on an airplane for which screening is conducted.

* * * * *

(c) Who is allowed to carry weapons on board? Only the following persons may carry either concealed or accessible unconcealed weapons on board:

(1) An official or employee of the United States who is authorized by a Federal agency to have the weapon.

(2) An official or employee of a State who is authorized by a State agency to have a weapon.

(3) An official or employee of a municipality who is authorized by that municipality to have a weapon.

(4) A person who has successfully completed an FAA-approved firearms training course and is authorized by the FAA and the certificate holder to have a weapon.

The original version of the regulation did not have headings. In rewriting it with headings, we identified with the reader and formatted the material to fit the reader's needs. As a result, we wrote additional questions that became separate paragraphs. The old version lumped all of this material together and made the reader do the searching. Now, we have done it for the reader.

3.d. Use Pronouns

√ Use "you" to engage your readers and let them know what they are expected to do.

When you address the reader as "you" in the text, the reader feels that you are addressing him or her directly. Remember that even though your rule may affect a thousand or a million people, you are speaking to the one person who is reading it. When your writing reflects this, it is more economical and has a greater impact on the reader.

A conveyance must be provided to FAA.	*You must provide a conveyance to FAA.*

Writing your regulation for an individual reader forces you to analyze carefully what you want the reader to do. By writing your documents to be clear to an individual, you will find it easier to:

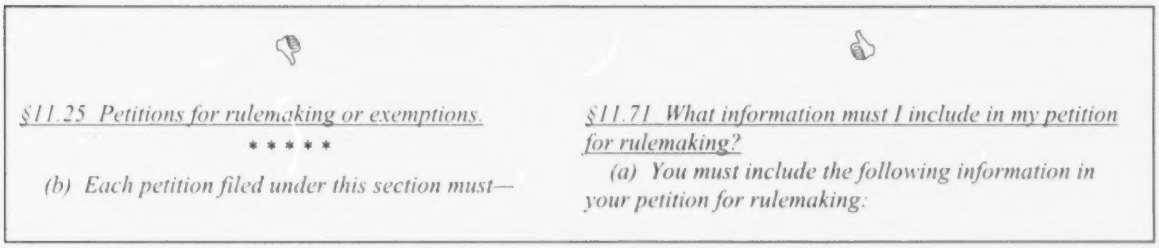
- Put information in a logical order
- Answer questions and provide the information that your reader wants to know
- Assign responsibilities and requirements clearly

You can define "you" by any of the following methods:

- State in the beginning of the rule who the audience is -- "This regulation tells you, a mechanic, how to get certified."
- Define "you" in the definitions section or an applicability paragraph if you are addressing one audience -- "'You' means a mechanic."
- Where you address multiple audiences in different areas of the regulation, define "you" in each context -- "If you are the operator, you must.... If you are the pilot, you must....."

√ Use "I" to refer to the reader in section headings.

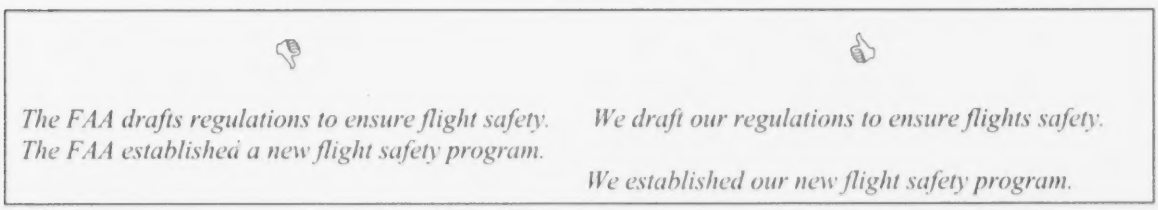
The question-and-answer format assumes that the reader is the one asking the questions. Therefore, use "I" in questions to refer to the reader. Do not use "I" in responses. In responses your agency (represented by "we") addresses the reader. By using "I" to ask questions in headings, you are anticipating questions the reader may have.



§11.25 Petitions for rulemaking or exemptions.	*§11.71 What information must I include in my petition for rulemaking?*
* * * * *	
(b) Each petition filed under this section must—	*(a) You must include the following information in your petition for rulemaking:*

√ Use "we" to refer to FAA.

Use "we" to refer to the FAA. At appropriate points in a regulation, for example at the beginning of each subpart or long section, start with "the FAA" and then use "we" when referring to the agency. That will remind your reader who "we" refers to. By using "we" to respond to questions, you state clearly what FAA requires and what our responsibilities are. You also avoid using the passive voice and use fewer words. Since you will never be asking the questions (only the reader does that), you should not use "we" in section headings.



The FAA drafts regulations to ensure flight safety.	*We draft our regulations to ensure flights safety.*
The FAA established a new flight safety program.	*We established our new flight safety program.*

√ Be sure to define pronouns clearly.

This part applies to the issuance, amendment, and repeal of any regulation for which FAA ("we") follows public rulemaking procedures under the Administrative Procedure Act....

3.e. Use Active Voice

√ Active voice is the best way to identify who is responsible for what action.

In an active sentence, the person or agency who is taking an action is the subject of the sentence. In a passive sentence, the person or item that is acted upon is the subject of the sentence. Passive sentences often do not identify who is performing the action.

(a) Refusal by the holder of a certificate to take a drug or alcohol test is grounds for— *(1) Denial of an application for any certificate or rating....* *(2) Suspension or revocation of any certificate or rating....*	*(a) If a certificate holder refuses to take a drug or alcohol test, FAA may do the following:* *(1) Deny an application for any certificate or rating....* *(2) Suspend or revoke any certificate....*

More than any other writing technique, using active voice and specifying who is taking an action will change the character of our writing and clarify our documents.

How do you identify passive sentences? Passive sentences have two basic features, although both do not appear in every passive sentence.

- A past participle (generally a verb with "ed" on the end)
- A form of the verb "to be."

Avoid beginning sentences with "There is" or "There are." Instead of saying "There are several factors that the court must consider," say "The court must consider several factors."

Regulations have been proposed by the Federal Aviation Administration.	*We have proposed regulations.*

The application must be approved by the agency's regional office.	*Our regional office must approve your application.*

In a very few instances, passive voice may be appropriate. For example, when one action follows another as a matter of law, and there is no actor (besides the law itself) for the second action, a passive sentence may be the best method of expression.

If you do not pay the royalty on your mineral production, your lease will be terminated [by the action of the law].

3.f. Use Short Sentences

√ Use short sentences to deliver a clear message.

The best way to tell your reader what you want is a short, straightforward sentence. Complex sentences loaded with dependent clauses and exceptions confuse the reader by losing the main point in a forest of words. Resist the temptation to put everything in one sentence. Break up your idea into a list, or make each one the subject of its own sentence.

The certificate holder must provide and use means to prevent each item of galley equipment and each serving cart, when not in use, and each item of crew baggage, which is carried in a passenger or crew compartment from becoming a hazard by shifting under the appropriate load factors corresponding to the emergency landing conditions under which the airplane was type certificated.

The certificate holder must ensure that the following items cannot shift during an emergency landing:

(1) Galley equipment;

(2) Serving carts that are not in use;

(3) Crew baggage carried in the crew or passenger compartment.

Complexity is the greatest challenge of clear communication. You may need to be especially inventive to translate complicated provisions into more manageable language. In the following example, we have made an "if" clause into a separate sentence. By beginning the first sentence with "suppose that" and the second sentence with "in this case," we have preserved the relationship between the two.

If you take less than your entitled share of production for any month, but you pay royalties on the full volume of your entitled share in accordance with the provisions of this section, you will owe no additional royalty for that lease for prior periods when you later take more than your entitled share to balance your account. This also applies when the other participants pay you money to balance your account.

Suppose that one month you pay royalties on your full share of production but take less than your entitled share. In this case, you may balance your account in one of the following ways without having to pay more royalty. You may either:

(a) Take more than your entitled share in the future; or

(b) Accept money from other participants.

3.g. Address One Person, Not a Group

√ Singular nouns and verbs prevent confusion about whether a requirement applies to individual readers or to groups.

In the following example, the reader doesn't know what the approved minimum altitudes are, or whether the minimums are different for aircraft and helicopters.

Over congested areas, aircraft pilots and helicopter pilots must maintain approved minimum altitudes.	*Over congested areas, you must maintain the following minimum altitudes:* *a) If you are an airplane pilot, stay 1000 feet above the highest obstacle.* *(a)* b) If you are a helicopter pilot, stay at an altitude that is without hazard to persons or property on the ground.

In addressing a single person, "you" avoids the awkwardness of "his or her" or "he or she" by addressing the reader directly.

Each crewmember must have his or her shoulder harness properly fastened.	*You must properly fasten your shoulder harness.*

3.h. Use the Present Tense

√ A document written in the present tense is more immediate and less complicated.

Using the present tense makes your document more direct and forceful. The more you use conditional or future tense, the harder your reader has to work to understand your meaning. Writing your document entirely in the present tense saves your reader work and helps you to make your point clearly.

These sections describe types of information that would satisfy the application requirements for a private pilot certificate	*These sections tell you how to meet the requirements for a private pilot certificate.*

Even if you are covering an event that occurred in the past, you can clarify the material for your reader by writing as much as possible in the present tense.

Applicants who were Federal employees at the time that the injury was sustained should have filed a compensation request at that time. Failure to do so could have an effect on the degree to which the applicant can be covered under this part.	*You might not be covered under this part if:* *(a) You were a Federal employee at the time of the injury; and* *(b) You did not file a report with us at that time.*

You help your reader understand and relate to your document if you eliminate the need for him or her to "translate" the text from the past or conditional tense into the present. Remember, the less work your reader has to do to understand, the easier it will be for him or her to comply with what you want.

3.i. Use "Must" To Indicate Requirements

√ The word "must" is the clearest way to convey to your readers that they have to do something.

"Shall" is one of those officious and obsolete words that has encumbered regulations and other documents for many years. The message that "shall" sends to the reader is, "this is boring material." "Shall" is imprecise. It can indicate either an obligation or a prediction. Dropping "shall" is a major step in making your regulation more reader-friendly Many agencies already use the word "must" to convey obligations with no adverse legal effects.

You can avoid "shall" by substituting "must" to indicate an obligation or "will" to indicate that an action will occur in the future. Be careful to consider which meaning you intend to communicate to your readers.

Each required crewmember shall have his or her own seat.	*You must have your own seat.*
The pilot in command shall be notified by air traffic control.	*Air traffic control will notify you.*

3.j. Place Words Carefully

√ Avoid ambiguous phrasing that can mislead your reader.

How you place words in relation to each other can greatly affect your document. Using short sentences will often make this problem disappear.

In the example below, it is difficult for the reader of the old style provision to figure out how the words relate to each other.

(a) Each training program must provide the emergency training set forth in this section with respect to each airplane type, model, and configuration, each required crewmember, and each kind of operation conducted, insofar as appropriate for each crewmember and the certificate holder.

(a) Each training program must include emergency training, as required in this section, for the following:

(1) Each airplane type, model, and configuration.

(2) Each required crewmember.

(3) Each kind of operation.

You will eliminate many potential sources of ambiguity by writing shorter sentences. The less complex the sentence, the clearer the meaning and the smaller the chance of ambiguity creeping in. Still, you must watch how you place words, even in short sentences.

As you write, place your words with care to avoid possible misinterpretations or muddied meanings. A carefully written document is clear, concise, and unambiguous.

3.k. Use Tables

√ If-then tables are an ideal way to make complex provisions readily understandable.

By laying out the material in a visually appealing style, tables help your reader to see relationships in a way that dense text never could. By laying out complex provisions visually, you help the reader to see relationships in a way that dense text never could. Tables generally use many fewer words than a straight textual explanation would use.

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes,

a) Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.

b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of at least 1000 feet above the highest obstacle within a horizontal radius of 2000 feet of the aircraft.

c) Over other than congested areas. An altitude of 500 feet above the surface except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

You may not operate an aircraft below the following altitudes, except while you take off or land:

If...	*And if...*	*Then you must...*
a) You fly anywhere and a power unit fails	*you must make an emergency landing*	*maintain an altitude that allows you to land without hazard to persons or property on the ground*
b) You fly over a congested area of a city, town, or settlement, or over any open air assembly of persons		*maintain an altitude of at least **1000 feet** above the highest obstacle within a horizontal radius of 2000 feet of the aircraft*
c) You fly over an uncongested area		*maintain an altitude of at least **500 feet** above the surface*
d) You fly over an uncongested area	*you are over open water or sparsely populated areas*	*operate at least **500 feet** away from any person, vessel, vehicle, or structure*

If-then tables are a powerful tool for simplifying complicated material.

3.I. Avoid Confusing Words and Constructions

√ Your document will be clearer if you avoid confusing phrasing.

Define each abbreviation or acronym the first time you use it: In general, use abbreviations to refer only to terms that are central to the regulation. For example, if the regulation is about the Comprehensive Environmental Response, Compensation, and Liability Act, you can refer to it as CERCLA. But do not abbreviate terms that you use only one or a few times. Write them out each time.

Use the same term consistently to identify a specific thought or object: For example, if you use the term "senior citizens" to refer to a group, continue to use this term throughout your document. Do not substitute another term, such as "the elderly," that will cause the reader to wonder if you are referring to the same group.

Define words in a way that does not conflict with ordinary or accepted usage: If possible, use a word in a way that is consistent with its everyday meaning rather than creating a new meaning for your document. A change in meaning may confuse the reader, and you create ambiguity if you use the word elsewhere in your document in its ordinary sense. For example, a regulation should not say "airplane" to refer to helicopters, ultralights, and airships. Use a term such as "other aircraft" instead.

Don't use a string of nouns as an adjective": Too much government writing uses too many noun clusters--groups of nouns "sandwiched" together. Avoid these confusing constructions by using more prepositions and articles to clarify the relationships among the words.

Underground mine worker safety protection procedures development	*Develop procedures to protect the safety of workers in underground mines*

Use pronouns that clearly refer to a specific noun: If a pronoun could refer to more than one person or object in a sentence, repeat the name of the person or object or rewrite the sentence.

After the Administrator appoints an Assistant Administrator, he or she must...	*After the Administrator appoints an Assistant Administrator, the Assistant Administrator must...*

Avoid jargon: Readers are put off by archaic jargon such as "hereafter," "heretofore," and "therewith." See Appendix A for words and expressions to avoid and Appendix B for plain language substitutes for commonly used jargon and unclear phrases.

Technical terms can convey a precise meaning but you shouldn't use a technical term where a non-technical one will do. Try to substitute everyday language for jargon as often as possible. Use technical terms only when your readers are exclusively technical experts. If your document is intended for both technical and non-technical readers, write for the non-technical reader.

Avoid stilted, wordy language: Wordy, dense construction is one of the biggest problems in regulation writing. Nothing is more confusing to the reader than long, complex sentences containing multiple phrases and clauses.

If FAA finds that an individual has received a private pilot certificate to which the individual was not entitled, whether or not receiving the certificate was due to the individual's fault or misrepresentation, the individual shall have the certificate revoked.	*If FAA finds that you received a private-pilot certificate that you weren't entitled to, FAA will revoke your certificate.*

3.m. Use Informative Headings

Headings help readers find their way through a document and locate information they need to know.

It's often useful to start writing your document by developing an outline of headings and structuring them to your readers' concerns. This approach can also reveal major groupings of information that you might want to identify with centered headings.

A document with lots of informative headings is easy to follow. Using more headings helps you break up the document into logical, understandable pieces. Informative headings are more specific and thus more helpful to the reader than are short headings that cover several pieces of information. Questions make excellent headings.

Headings should not be so long that they overwhelm the material in the section itself. Avoid headings with one-word answers.

sec. 91.129 Operations in Class D airspace.	Class D Airspace Operations sec. 91.129 What general requirements apply in Class D airspace? sec. 91.130 What communication requirements apply in Class D airspace? sec. 91.131 At what minimum altitudes may I operate in Class D airspace? sec. 91.132 How do I approach and depart an airport, and use a noise abatement runway in Class D airspace? sec. 91.133 What may I do when ATC clears me to take off, land, or taxi on the surface in Class D airspace?

3.n. Divide Your Material Into Short Sections

√ Short sections break up material into easily understood segments that are visually appealing to the reader.

Short sections are easier to organize and understand. Long sections are confusing and visually unappealing.

Short sections also give you more opportunity to insert informative headings in your material. Remember that boldface section headings are your reader's best roadmap to the regulation. Long sections are usually very difficult to summarize meaningfully in a heading. When you write short sections, each heading can give the reader information about the entire contents of the section

§121.434 Operating experience, operating cycles, and consolidation of knowledge and skills.

(a) * *
(1) * *
(2) * *
(3) * *
(b) * *
(1) * *
(2) * *
(3) * *
(c) * *
(1) * *
(i) * *
(ii) * *
(2) * *
(3) * *
(i) * *
(ii) * *
(iii) * *
(d) * *
(1) * *
(2) * *
(3) * *
(e) * *
(f) * *
(g) * *
(1) * *
(2) * *
(h) * *
(1) * *
(2) * *
(3) * *
(4) * *
(i) * *
(ii) * *
(5) * *
(i) * *
(ii) * *
(iii) * *
(i) * *

§121.434 Operating experience, operating cycles, and consolidation of knowledge and skills: All crewmembers.

(a) * *
(b) * *
(c) * *

§121.435 Operating experience and operating cycles: Pilot crewmembers.

One paragraph.

§121.436 Operating experience and operating cycles: Flight engineers.

One paragraph.

§121.437 Operating experience and operating cycles: Flight attendants.

One paragraph.

§121.438 Line operating flight time for consolidation of knowledge: Pilot crewmembers.

(a) * *
(b) * *

3.o. Limit Each Paragraph To One Topic

√ Include only one topic in each paragraph to help your reader keep each idea separate.

Separating different topics into paragraphs is another way to help your reader understand your document. By making sure that each topic is in a separate paragraph, you give the reader a better idea of the underlying organization of your regulation. This makes it easier for your reader to find what he or she needs to know.

Using separate paragraphs is similar to using lists because it shows your reader the important issues and their relationship to subordinate topics. This is especially true because the new paragraphs that you identify often become subparagraphs.

(a) Notice of a bid advertisement shall be published in at least one local newspaper and in one trade publication at least 30 days in advance of sale. If applicable, the notice must identify the reservation within which the tracts to be leased are found. Specific descriptions of the tracts shall be available at the office of the superintendent. The complete text of the advertisement shall be mailed to each person listed on the appropriate agency mailing list.

(a) We will publish an advertisement to solicit bids 30 days before the sale.

(1) We will publish the notice in at least one local newspaper and in one trade publication.

(2) The notice will identify any reservation within which the tracts to be leased are found.

(3) We will mail the complete text of the advertisement to each person listed on the appropriate agency mailing list.

(b) Specific descriptions of the tracts will be available at the superintendent's office.

As the example above shows, indentations and "white space" greatly improve the readability of your rule. When you use separate paragraphs for each idea, you show your reader how the regulation is organized.

3.p. Use Lists

√ Vertical lists highlight important topics and make it easy for the reader to identify all elements in a series of requirements.

Vertical lists are much more visually appealing and easier to read than running text. They make your documents appear less dense and make it easier to spot main ideas. They are the best way to present multiple items, conditions, and exceptions. Vertical lists are also helpful in clarifying the chronological order of steps in a process. However, you can use too many vertical lists. Remember to use them to highlight important information that is complicated and not easily absorbed in text format.

Each completed well drilling application must contain a detailed statement including the following information: The depth of the well, the casing and cementing program, the circulation media (mud, air, foam, etc.), the expected depth and thickness of fresh water zones, and well site layout and design.

With your application for a drilling permit, provide the following information:

(a) Depth of the well;
(b) Casing and cementing program;
(c) Circulation media (mud, air, foam, etc.);
(d) Expected depth and thickness of fresh water zones; and
(e) Well site layout and design.

When a foreign student presents a completed Form I-20:

(a) Enter the student's admission number from Form 94;
(b) Endorse all copies of the form;
(c) Return a copy to the student; and
(d) Send a copy to the Immigration and Naturalization Service.

Appendix A
Words and Expressions to Avoid

abeyance
above [as an adjective]
afore-granted
aforementioned
aforesaid
before-mentioned
henceforward
hereby
herein
hereinafter
hereinbefore
hereunto
prior to
promulgated
pursuant to
said [as a substitute for "the", "that", or "those"]
same [as a substitute for "it", "he", "him", "she", or "her"]
thenceforth
thereunto
to wit
under-mentioned
unto
whatsoever
whensoever
whereas
whereof
whosoever
within-named
witnesseth

Appendix B
Simpler Words and Phrases

Official writing does *not* demand big words or fat phrases. Go out of your way to use ordinary English. If you do, your writing will be much clearer for your reader.

Instead of...	**Try...**
a and/or b	a or b, or both
accompany	go with
accomplish	carry out, do
accorded	given
accordingly	so
accrue	add, gain
accurate	correct, exact, right
additional	added, more, other
address	discuss
addressees	you
addressees are requested	(omit), please
adjacent to	next to
advantageous	helpful
adversely impact	hurt, set back
advise on	recommend, tell
afford an opportunity	allow, let
allocate	divide, give
anticipate	expect
a number of	some
apparent	clear, plain
appreciable	many
appropriate	(omit), proper, right
approximately	about
are required to	must
arrive onboard	arrive
as a means of	to
ascertain	find out, learn
as prescribed by	in, under
assist, assistance	aid, help
attain	meet
attempt	try
at the present time	at present, now
be advised	(omit)

Instead of...	Try...
benefit	help
by means of	by, with
capability	ability, can
caveat	warning
close proximity	near
combined	joint
commence	begin, start
comply with	follow
component	part
comprise	form, include
concerning	about, on
consequently	so
consolidate	combine, join, merge
constitutes	is, forms, makes up
contains	has
currently	(omit), now
deem	believe, consider, think, find
delete	cut, drop
demonstrate	prove, show
depart	leave
designate	appoint, choose, name
desire	want, wish
determine	decide, figure, find
disclose	show
discontinue	drop, stop
disseminate	give, issue, pass, send
due to the fact that	due to, since, because
during the period	during, effect
elect	choose, pick
eliminate	cut, drop, end
employ	use
encounter	meet
endeavor	try
enumerate	count
equitable	fair
equivalent	equal
establish	set up, prove, how

Instead of... **Try...**

evidenced	shown
evident	clear
exhibit	show
expedite	hasten, speed up
expeditious	fast, quick
expend	spend
expertise	ability, skill
facilitate	ease, help
failed to	didn't
feasible	can be done, workable
finalize	complete, finish
for a period of	for
forfeit	give up, lose
for the purpose of	for, to
forward	send
frequently	often
function	act, role, work
furnish	give, send
has a requirement for	needs
herein	here
heretofore	until now
herewith	below, here
however	but
identical	same
identify	find, name, show
immediately	at once
impacted	affected, changed
implement	carry out, start,
in accordance with	by, following, per, under
in addition	also, besides, too
in an effort to	to
inasmuch as	since
in a timely manner	on time, promptly
inception	start
incumbent upon	must
inform	tell
indicate	show, write down

Instead of... **Try...**

indication	sign
initial	first
initiate	start
in lieu of	instead of
in order that	for, so
in order to	to
in regard to	about, concerning, on
inter alia	(omit)
interface with	meet, work with
interpose no objection	don't object
in the amount of	for
in the event that	if
in the near future	shortly, soon
in the process of	(omit)
in view of	since
in view of the above	so, for this reason
is applicable to	applies to
is authorized to	may
is in consonance with	agrees with, follows
is responsible for	(omit), handles
it appears	seems
it is essential	must, need to
it is requested	please, we request, I request
is required to	must
limited number	few
limitations	limits
magnitude	size
maintain	keep, support
majority of	most
maximum	greatest, largest, most
methodology	method
minimize	decrease, lessen, reduce
minimum	least, smallest
modify	change
make modifications	make changes
monitor	check, watch
necessitate	cause, need

Instead of... **Try...**

notify	let know, tell
no later than May 10	by May 10th
not later than 4:00 PM	by 4:00 PM
notwithstanding	in spite of, still
numerous	many
objective	aim, goal
obligate	bind, compel
observe	see
on a ____ basis	(omit)
operate	run, use, work
optimum	best, greatest, most
option	choice, way
parameters	limits
participate	take part
perform	do
permit	let
pertaining to	about, of, on
point in time	point, time
portion	part
possess	have, own
practicable	feasible
preclude	prevent
previous	earlier, past
previously	before
prioritize	rank
prior to	before
proceed	do, go ahead, try
procure	buy
proficiency	skill
promulgate	issue, publish
provide	give, offer, say
provided that	if
provides guidance for	guides
purchase	buy
pursuant to	by, following, per, under
reflect	say, show
regarding	about, of, on
relative to	about, on
relocate	move

Instead of...	**Try...**
remain	stay

remainder	rest
remuneration	pay, payment
render	give, make
represents	is
requests	ask
require	must, need
requirement	need
reside	live
retain	keep
said, some, such	the, this, that
selection	choice
set forth in	in
similar to	like
solicit	ask for, request
state-of-the-art	latest
subject	the, this, your
submit	give, send
subsequent	later, next
subsequently	after, later, then
substantial	large, much
successfully complete	pass
sufficient	enough
take action	(omit)
task	ask
terminate	end, stop
the month of	(omit)
there are	(omit),exist
therefore	so
therein	there
thereof	its, their
the undersigned	I, we
the use of	(omit)
this office	we
timely	prompt
time period	from _____ to _____
transmit	send

Instead of...	**Try...**
-type	(omit)
under the provisions of	under

until such time as	until
utilize, utilization	use
validate	confirm
viable	workable
vice	instead of, versus
warrant	call for, permit
whereas	because, since with reference
to	about
with respect to	about
with the exception of	except for
witnessed	saw
your office	you